

~~SECRET~~

OFFICE OF LOGISTICS

FY 1983 PROGRAM BUDGET - ENHANCED PACKAGE (E01)
(DOLLARS IN THOUSANDS)

1. Utility Reliability and Equipment Improvements

A. Addition of New Fire Hydrants in Three Critical Locations	\$	20	
B. Replacement of One Existing Hydropulper Classified Waste System (SOMAT)		100	
C. Provision of an Alternate Water Source for Continuation of Agency Operations in Event of Interruption to Municipal Water Supply (Well and Pumps)		640	
D. Provision of an Additional 2500 KW Emergency Power Generator		1,100	
E. Replacement of the Ames Building Special Air Conditioning System		75	
F. Installation of Two-temperature, Dual-acting Thermostats to Control Heating and Air Conditioning Throughout Headquarters Bldg.		200	
G. Repairs to Automatic Control Valves, Dampers, etc. in Headquarters Bldg.		200	\$ 2,335

2. Printing and Photography Equipment

A. 50-Inch Single Color Press (1)	400	
B. Laser Platemaker	150	
C. Laser Typesetter	150	
D. Color Separation Scanner	380	
E. Motion Picture Film Processor (3)	50	
F. Hardware/Software for Above	100	1,230

Adding
costs
Briefing Board
in the Press - 50 in
Motion Picture

780

3.

150 25X1

20X30 BBS

~~SECRET~~

Rational and Benefits of Proposes
P&PD Equipment Procurement

*Hidden
Costs*

1. 50-Inch Two-Color Press - A 50-inch single color offset printing press was initially identified as required to replace a 26 year old press which is heavily relied upon for the production of oversize maps and charts. The current press is in frequent need of repair, and is so old that spare parts are no longer available for it. Manufacture of the replacement (single-color) press has stopped. The only 50-inch press now available is a two-color model. This press can be purchased for about what was projected for the single-color (\$389,000), and it has the added benefit of being able to print two colors on a sheet of paper simultaneously. The efficiencies resulting from the replacement of the old press with the new two-color in FY 1982 are expected to save a manyear having a dollar value of \$28,000. These efficiencies are the result of the press' two color capability, and its higher printing speed; 10,000 impressions per hour instead of 5,000.

2. Laser Platemaker - The acquisition of a laser platemaker, at a cost of \$170,000, will automate the production of printing plates, and reduce the need for the photographic process traditionally required in offset lithography. This is expected to result in a film savings of \$80,000 per year, and labor savings of two manyears or \$56,000 per year in prepress operations.

3. Laser Typesetter - A laser-based phototypesetting machine costing \$150,000 was identified as the replacement device for the Autologic APS/4 which is seven years old, and in frequent need of repair. The laser typesetter was also to serve as the character generator in a full digital prepress system. Recent developments now make it possible for P&PD to utilize a more conventional cathode ray tube phototypesetter similar to the current APS/5. The machine ^{now} projected to replace the APS/4 is in fact an updated APS/5. Depending upon which specific model is procured the cost will range from \$100,000 to \$150,000. The \$100,000 machine will eliminate P&PD's dependence upon an outdated and unreliable typesetter. The \$150,000 typesetter will do likewise, and because it has the capability to handle output media almost seventeen inches wide, it will also enable P&PD to produce correctly positioned for page assemblies thereby significantly reducing prepress processing time.

4. Color Separation Scanner - The acquisition of a color scanner as an integral part of the digital prepress system will enable the system to handle full color photographs and artwork. The color scanner electronically separates color pictures into their three primary colors. These electronic separations can be

digitized and stored on disk memory for recall, or imaged directly onto film negatives for inclusion in a layout to be printed. The cost for a color scanner that can produce color separations up to 16" x 20" is approximately \$350,000. The color scanner will replace the labor intensive and time consuming manual offset camera procedures that are currently employed. Benefits to be realized from a color scanner include greatly reduced throughput times and film costs, as well as the ability to accurately reproduce and match colors electronically rather than relying on trial and error matching according to the photographer's eye.

5. Digital Prepress Interface Hardware/Software - The final element of the digital prepress system will be the interactive interface which will control and integrate all elements of the system. Initial cost estimate for the interface is \$100,000, but no specific system has been identified. The interactive interface will permit area composition of entire pages electronically on a video display terminal. This will include real-time editing, positioning of text and graphics, and the merging of scanned photographs and color separations into made-up pages for transmission to the laser platemaker. The interactive area composition interface will replace the manual assembly of text and photographs into prepared pages, and will provide the benefits of decreasing preparation time while offering the efficiencies of centralizing the varied production functions of preparing typeset pages for publication.

6. Motion Picture Film Processor - The procurement of a motion picture film processor costing \$50,000 will permit the cancellation of photographic laboratory services contract with a projected cost to P&PD of \$30,000 in FY 1982. This procurement will not only result in substantial cost savings, it will also improve security by allowing in-house film processing. The elimination of the transportation of films to and from the vendor's site will also improve job throughput time.